Claim Amendments

Please amend claims 10 and 24, and add new claims 30 and 31 as follows:

- 1. (original) A spin-coating system comprising a supply of process solution in fluid communication with a dispenser through a dispense line, and a pressure sensor that measures pressure of the process solution in the dispense line at a time related to a step of dispensing the process solution, to control timing of a subsequent spin-coating process step.
- 2. (original) The system of claim 1 wherein the pressure sensor comprises a pressure transducer.
- 3. (original) The system of claim 1 comprising a dispense valve between the supply of process solution and the dispenser, and the pressure sensor is between the dispense valve and the dispenser.
- 4. (original) The system of claim 1 wherein the pressure sensor detects a beginning or end of process solution being dispensed from the dispenser.
- 5. (original) The system of claim 1 further comprising a control system for controlling a spin-coating process, wherein the pressure sensor detects a beginning or end of process solution dispense from the dispenser, and the pressure sensor sends a signal to the control system at a detected beginning or at a detected end of process solution dispense.
- 6. (original) The system of claim 5 wherein the process solution is a photoresist solution and the pressure sensor signals the control system at a detected end of photoresist solution dispense.

- 7. (original) The system of claim 5 wherein the process solution is a developer solution and the control pressure sensor signals the control system at a detected start of developer solution dispense.
- 8. (original) The system of claim 1 wherein the process solution is selected from the group consisting of a photoresist, a developer, a solvent, and deionized water.
- 9. (original) A spin-coating system comprising:
 - a turntable to support and rotate a substrate;
- a dispenser moveable between a dispensing position and a non-dispensing position;
- a supply of process solution in fluid communication with the dispenser through a dispense line;
 - a pressure sensor that measures pressure of the process solution;
- a process control system that controls application of the process solution to the substrate, the process control system being programmed to interrupt serial control to execute a process command.
- 10. (currently amended) The system of claim 9 wherein

the system comprises a dispense valve between the supply of process solution and the dispenser,

the pressure sensor measures pressure of the process solution in the disperse dispense line, and

the pressure sensor is between the dispense valve and the dispenser.

11. (original) The system of claim 9 wherein the process solution is chosen from the group consisting of a photoresist solution and a developer solution.

- 12. (original) The system of claim 9 wherein the pressure sensor sends a signal to the control system at the beginning or the end of dispense of the process solution, and the control system interrupts control of the process.
- 13. (original) The system of claim 12 wherein the process solution is a photoresist solution and the pressure sensor sends a signal to the control system at an end of photoresist solution dispense.
- 14. (original) The system of claim 12 wherein the process solution is a developer solution and the pressure sensor sends a signal to the control system at the start of developer solution dispense.
- 15. (original) The system of claim 9 wherein the process solution is selected from the group consisting of a photoresist, a developer, deionized water, and a solvent.

16-23. (canceled)

- 24. (currently amended) A spin-coating system comprising a supply of process solution in fluid communication with a dispenser through a dispense line and a pressure sensor that measures pressure of the process solution and compares the measured pressure to an expected pressure to identify a difference between the measured pressure and the expected pressure to detect a malfunction in the apparatus.
- 25. (original) The system of claim 24 wherein the malfunction is an equipment malfunction.
- 26. (original) The system of claim 24 wherein the system detects a malfunction by measuring pressure of process solution in the dispense line during dispense of the process solution.

27. (original) The system of claim 26 wherein the process solution is selected from the group consisting of photoresist, developer, solvent, deionized water, and cleaner.

28-29. (canceled)

- 30. (new) The system of claim 24 wherein pressure sensor measures pressure of the process solution during process solution dispense to generate a measured pressure profile and compares the measured pressure profile to an expected pressure profile to identify a difference between the measured pressure profile and the expected pressure profile to detect a malfunction in the apparatus.
- 31. (new) The system of claim 24 wherein the malfunction is selected from the group consisting of: a line clog and a leak.